

AUTHOR INDEX

	PAGE
<i>Adam, M. G.</i> , The role of magnetic forces in sunspot equilibrium	287
<i>Allen, D. A. and Webster, B. Louise</i> , Symbiotic stars and dust	171
<i>Atkinson, R. d'E.</i> , On the Earth's axes of rotation and figure	381
<i>Austin, T. B., Godwin, J. G. and Peach, J. V.</i> , Studies of rich clusters of galaxies—III. Photometry of the cluster A1930 and the m^*-z relation	135
<i>Bahcall, J. N., Charles, P. A., Davison, P. J. N., Sanford, P. W., Kellogg, E. and York, D.</i> , Copernicus—X-ray observations of 3U 0750-49	41P
<i>Balasubramanian, V. and Mohanty, D. K.</i> , PSR 1911+03: a new pulsar with a large duty-cycle	17P
<i>Balona, L. A., Penny, A. J. and Penfold, J. E.</i> , The spectroscopic binary system HD 158320 (=3U 1727-33?)	387
<i>Bath, G. T.</i> , Dynamical instabilities and mass exchange in binary systems	311
<i>Batten, A. H. and Erceg, V.</i> , A new spectroscopic orbit for Capella	47P
<i>Bessell, M. S. and Wickramasinghe, D. T.</i> , High dispersion H β spectroscopy of six southern white dwarfs	11P
<i>Bishop, N. T. and Landsberg, P. T.</i> , A principle of impotence allowing for Newtonian cosmologies with a time-dependent gravitational constant	279
<i>Blackwell, D. E., Ellis, R. S., Ibbetson, P. A., Petford, A. D. and Willis, R. B.</i> , The continuum flux distribution for Arcturus	425
<i>Blackwell, D. E., Ibbetson, P. A. and Petford, A. D.</i> , Precision measurement of relative oscillator strengths—II, Fe I transitions from levels a^3D_4 (0.00 eV) and a^3D_3 (0.05 eV)	195
<i>Boland, B. C., Dyer, E. P., Firth, J. G., Gabriel, A. H., Jones, B. B., Jordan, C., McWhirter, R. W. P., Monk, P. and Turner, R. F.</i> , Further measurements of emission line profiles in the solar ultraviolet spectrum	607
<i>Breuer, Reinhard and Ryan, Michael, P.</i> , The porthole effect and rings of fire in finite metalaxies	209
<i>Brosche, P.</i> , The effect of systematic differences between reference positions on the second harmonic of the Earth's gravitational potential	131
<i>Charles, P. A.</i> (see Bahcall, J. N.)	
<i>Cohen, R. J.</i> , Neutral hydrogen in the galactic centre region—I. The observations	659
<i>Coleman, C. I., Reay, N. K. and Worswick, S. P.</i> , Monochromatic isophotometry of planetary nebulae—I. Observations of NGC 6210, 6543, 6826, 7009, 7027 and 7662	415
<i>Cook, A. H.</i> , On the structure of hydroxyl maser sources	605
<i>Cooke, D. J. and Wall, J. V.</i> , Source counts at high spatial densities from pencil beam observations of background fluctuations	9
<i>Cowan, R. D. and Fawcett, B. C.</i> , The identification of solar flare Fe XVIII to Fe XXIII emission lines from $2s^n 2p^k-2s^{n-1} 2p^{k+1}$ transitions	I
<i>Cruise, A. M. and Tuohy, I. R.</i> , Observation of an accretion wake and pre-eclipse dips in Centaurus X-3	33P
<i>Das, P. K. and Narlikar, J. V.</i> , Central gravitational redshifts from static massive objects	87
<i>Davison, P. J. N.</i> (see Bahcall, J. N.)	
<i>Dodd, R. J., Morgan, D. H., Nandy, K., Reddish, V. C. and Seddon, H.</i> , A study of 3000 faint galaxies	329
<i>Dodds, D., Strong, A. W. and Wolfendale, A. W.</i> , Galactic γ -rays and cosmic ray origin	569
<i>Dopita, Michael and Gibbons, Anthony H.</i> , Electronographic measurements of the density structure of NGC 6543 using the O $^+$ and Cl $^{++}$ ions	73
<i>Dyer, E. P.</i> (see Boland, B. C.)	
<i>Ellis, R. S.</i> (see Blackwell, D. E.)	
<i>Erceg, V. and Batten, A. H.</i> , A new spectroscopic orbit for Capella	47P
<i>Evans, T. Lloyd</i> , Near-infrared photometry of globular clusters—IV. The metal poor cluster NGC 6656 (M22)	647
<i>Fawcett, B. C. and Cowan, R. D.</i> , The identification of solar flare Fe XVIII to Fe XXIII emission lines from $2s^n 2p^k-2s^{n-1} 2p^{k+1}$ transitions	I
<i>Firth, J. G.</i> (see Boland, B. C.)	
<i>Gabriel, A. H.</i> (see Boland, B. C.)	
<i>Gardner, F. F. and Whiteoak, J. B.</i> , G0.55-0.85, an H II region-molecular cloud complex	29P
<i>Gibbons, Anthony H. and Dopita, Michael</i> , Electronographic measurements of the density structure of NGC 6543 using the O $^+$ and Cl $^{++}$ ions	73
<i>Glass, I. S.</i> , Intermediate infrared colours of M-dwarf stars	19P
<i>Godwin, J. G.</i> (see Austin, T. B.)	
<i>Griffin, R.</i> , Curve-of-growth analysis of a red giant in M67	181
<i>Griffin, R. F.</i> , Photoelectric radial velocities, Paper VI. Heard's IAU standard stars	407
<i>Gull, S. F.</i> , The radio remnant of Kepler's supernova	237

AUTHOR INDEX

	PAGE
Adam, M. G., The role of magnetic forces in sunspot equilibrium	287
Allen, D. A. and Webster, B. Louise, Symbiotic stars and dust	171
Atkinson, R. d'E., On the Earth's axes of rotation and figure	381
Austin, T. B., Godwin, J. G. and Peach, J. V., Studies of rich clusters of galaxies—III. Photometry of the cluster A1930 and the $m^* - z$ relation	135
Bahcall, J. N., Charles, P. A., Davison, P. J. N., Sanford, P. W., Kellogg, E. and York, D., Copernicus—X-ray observations of 3U 0750-49	41P
Balasubramanian, V. and Mohanty, D. K., PSR 1911+03: a new pulsar with a large duty-cycle	17P
Balona, L. A., Penny, A. J. and Penfold, J. E., The spectroscopic binary system HD 158320 (= 3U 1727-33?)	387
Bath, G. T., Dynamical instabilities and mass exchange in binary systems	311
Batten, A. H. and Erceg, V., A new spectroscopic orbit for Capella	47P
Bessell, M. S. and Wickramasinghe, D. T., High dispersion H β spectroscopy of six southern white dwarfs	11P
Bishop, N. T. and Landsberg, P. T., A principle of impotence allowing for Newtonian cosmologies with a time-dependent gravitational constant	279
Blackwell, D. E., Ellis, R. S., Ibbetson, P. A., Petford, A. D. and Willis, R. B., The continuum flux distribution for Arcturus	425
Blackwell, D. E., Ibbetson, P. A. and Petford, A. D., Precision measurement of relative oscillator strengths—II, Fe I transitions from levels a^5D_4 (0.00 eV) and a^5D_3 (0.05 eV)	195
Boland, B. C., Dyer, E. P., Firth, J. G., Gabriel, A. H., Jones, B. B., Jordan, C., McWhirter, R. W. P., Monk, P. and Turner, R. F., Further measurements of emission line profiles in the solar ultraviolet spectrum	607
Breuer, Reinhard and Ryan, Michael, P., The porthole effect and rings of fire in finite metalaxies	209
Brosche, P., The effect of systematic differences between reference positions on the second harmonic of the Earth's gravitational potential	131
Charles, P. A. (see Bahcall, J. N.)	
Cohen, R. J., Neutral hydrogen in the galactic centre region—I. The observations	659
Coleman, C. I., Reay, N. K. and Worswick, S. P., Monochromatic isophotometry of planetary nebulae—I. Observations of NGC 6210, 6543, 6826, 7009, 7027 and 7662	415
Cook, A. H., On the structure of hydroxyl maser sources	605
Cooke, D. J. and Wall, J. V., Source counts at high spatial densities from pencil beam observations of background fluctuations	9
Cowan, R. D. and Fawcett, B. C., The identification of solar flare Fe XVIII to Fe XXIII emission lines from $2s^n 2p^k - 2s^{n-1} 2p^{k+1}$ transitions	I
Cruise, A. M. and Tuohy, I. R., Observation of an accretion wake and pre-eclipse dips in Centaurus X-3	33P
Das, P. K. and Narlikar, J. V., Central gravitational redshifts from static massive objects	87
Davison, P. J. N. (see Bahcall, J. N.)	
Dodd, R. J., Morgan, D. H., Nandy, K., Reddish, V. C. and Seddon, H., A study of 3000 faint galaxies	329
Dodds, D., Strong, A. W. and Wolfendale, A. W., Galactic γ -rays and cosmic ray origin	569
Dopita, Michael and Gibbons, Anthony H., Electronographic measurements of the density structure of NGC 6543 using the O $^+$ and Cl $^{++}$ ions	73
Dyer, E. P. (see Boland, B. C.)	
Ellis, R. S. (see Blackwell, D. E.)	
Erceg, V. and Batten, A. H., A new spectroscopic orbit for Capella	47P
Evans, T. Lloyd, Near-infrared photometry of globular clusters—IV. The metal poor cluster NGC 6656 (M22)	647
Fawcett, B. C. and Cowan, R. D., The identification of solar flare Fe XVIII to Fe XXIII emission lines from $2s^n 2p^k - 2s^{n-1} 2p^{k+1}$ transitions	I
Firth, J. G. (see Boland, B. C.)	
Gabriel, A. H. (see Boland, B. C.)	
Gardner, F. F. and Whiteoak, J. B., Go 55-0.85, an H II region-molecular cloud complex	29P
Gibbons, Anthony H. and Dopita, Michael, Electronographic measurements of the density structure of NGC 6543 using the O $^+$ and Cl $^{++}$ ions	73
Glass, I. S., Intermediate infrared colours of M-dwarf stars	19P
Godwin, J. G. (see Austin, T. B.)	
Griffin, R., Curve-of-growth analysis of a red giant in M67	181
Griffin, R. F., Photoelectric radial velocities, Paper VI. Heard's IAU standard stars	407
Gull, S. F., The radio remnant of Kepler's supernova	237

	PAGE
Gull, S. F., The X-ray, optical and radio properties of young supernova remnants ...	263
Haar, D. ter and Pelling, Margaret A., Line leaking models for interstellar molecular emission and absorption—I. The anomalous absorption and emission by formaldehyde ...	103
Harwit, Martin and Melnick, Gary, Orientation of planetary nebulae within the Galaxy ...	441
Hawkes, R. L. and Jones, J., Television observations of faint meteors—II. Light curves ...	159
Heaton, K. C. and Henriksen, R. N., Accretion and effluxion of mass and angular momentum	27
Henriksen, R. N. and Heaton, K. C., Accretion and effluxion of mass and angular momentum	27
Hilditch, R. W., HD 151965—a new bright Bp : Si variable star ...	23P
Hill, P. W., Kilkenny, D. and Schmidt-Kaler, Th., H β photometry of southern early-type stars and galactic structure away from the plane ...	353
Holloway, N. J., Particle acceleration at pulsar magnetic poles ...	619
Hunter, J. K., Penston, M. V. and O'Neill, A., Further observations of the Orion nebula cluster ...	219
Ibbetson, P. A. (see Blackwell, D. E.)	
John, T. L. and Williams, R. J., The continuous absorption coefficient of the negative oxygen ion in the infrared ...	7P
Jones, B. B. (see Boland, V. C.)	
Jones, J. and Hawkes, R. L., Television observations of faint meteors—II. Light curves ...	159
Jordan, C. (see Boland, B. C.)	
Kellogg, E. (see Bahcall, J. N.)	
Kilkenny, D. (see Hill, P. W.)	
Landsberg, P. T. and Bishop, N. T., A principle of impotence allowing for Newtonian cosmologies with a time-dependent gravitational constant ...	279
Liang, E. P., A note on the Zeldovich $p = \rho$ cold big bang ...	551
Lyne, A. G., Ritchings, R. T. and Smith, F. G., The period derivatives of pulsars ...	579
Mason, H. E., The interpretation of the forbidden emission lines from a coronal condensation	119
McWhirter, R. W. P. (see Boland, B. C.)	
Melnick, Gary and Harwit, Martin, Orientation of planetary nebulae within the Galaxy ...	441
Mohanty, D. K. and Balasubramanian, V., PSR 1911 + 03: A new pulsar with a large duty-cycle ...	17P
Monk, P. (see Boland, B. C.)	
Morgan, D. H. (see Dodd, R. J.)	
Morgan, D. H. and Nandy, K., Ultraviolet colours of quasars ...	599
Moss, D. L., Large scale magnetic fields in late-type stars ...	393
Nandy, K. (see Dodd, R. J.)	
Nandy, K. and Morgan, D. H., Ultraviolet colours of quasars ...	599
Nandy, K., Napier, W. McD. and Thompson, G. I., Ultraviolet observations of HD 77581 (= 2U 0900-40) ...	259
Napier, W. McD. (see Nandy, K.)	
Narlikar, J. V. and Das, P. K., Central gravitational redshifts from static massive objects ...	87
Netzer, H., Physical conditions in active nuclei—I. The Balmer decrement ...	395
O'Neill, A. (see Hunter, J. K.)	
Peach, J. V. (see Austin, T. B.)	
Pearson, T. J., The 5C 5 survey of radio sources ...	475
Pelling, Margaret A. and Haar, D. ter, Line-leaking models for interstellar molecular emission and absorption—I. The anomalous absorption and emission by formaldehyde ...	103
Penfold, J. E. (see Balona, L. A.)	
Penfold, J. E., Penny, A. J. and Warren, P. R., Photometry of SK160 = SMC-X1 ...	445
Penny, A. J. (see Balona, L. A.)	
Penny, A. J. (see Penfold, J. E.)	
Penston, M. V. (see Hunter, J. K.)	
Petford, A. D. (see Blackwell, D. E.)	
Raine, D. J., Mach's principle in general relativity ...	507
Reay, N. K. (see Coleman, C. I.)	
Reddish, V. C. (see Dodd, R. J.)	
Rees, M. J., Expected polarization properties of binary X-ray sources ...	457
Rees, M. J., Quasar absorption spectra: radiative interactions between absorbing clouds and the origin of redshift 'doublets' ...	1P
Rees, M. J. and Saslaw, W. C., Massive black holes in extragalactic radio source components?	53
Ritchings, R. T. (see Lyne, A. G.)	
Ryan, Michael P. and Breuer, Reinhard A., The porthole effect and rings of fire in finite metagalaxies ...	209
Sakurai, Takeo, The evolution of the solar inner rotation ...	35
Sanford, P. W. (see Bahcall, J. N.)	

	PAGE
<i>Saslaw, W. C. and Rees, M. J.</i> , Massive black holes in extragalactic radio source components?	53
<i>Schmidt-Kaler, Th.</i> (see Hill, P. W.)	
<i>Seddon, H.</i> (see Dodd, R. J.)	
<i>Shobbrook, R. R., Smyth, M. J. and Stobie, R. S.</i> , Frequency analysis of the three delta Scuti stars BS 3265, 1653 and 242	143
<i>Sinclair, A. T.</i> , The orbital resonance amongst the Galilean satellites of Jupiter	59
<i>Smith, F. G.</i> (see Lyne, A. G.)	
<i>Smyth, M. J.</i> (see Shobbrook, R. R.)	
<i>Stobie, R. S.</i> (see Shobbrook, R. R.)	
<i>Strong, A. W.</i> (see Dodds, D.)	
<i>Sunyaev, R. A. and Zel'dovich, Ya. B.</i> , On the possibility of radioastronomical investigation of the birth of galaxies	375
<i>Taylor, R. J. and Wood, P. R.</i> , The gas and horizontal branch star content of globular clusters	467
<i>Thompson, G. I.</i> (see Nandy, K., p. 259)	
<i>Tuohy, I. R. and Cruise, A. M.</i> , Observation of an accretion wake and pre-eclipse dips in Centaurus X-3	33P
<i>Turner, R. F.</i> (see Boland, B. C.)	
<i>Wall, J. V. and Cooke, D. J.</i> , Source counts at high spatial densities from pencil beam observations of background fluctuations	9
<i>Warren, P. R.</i> (see Penfold, J. E., p. 445)	
<i>Webbink, Ronald F.</i> , Evolution of helium white dwarfs in close binaries	555
<i>Webster, Adrian</i> , The radio halo of the Galaxy	243
<i>Webster, B. Louise and Allen, David A.</i> , Symbiotic stars and dust	171
<i>Wegner, Gary</i> , Spectrophotometry of stars near the cool end of the white dwarf sequence	529
<i>Wegner, Gary</i> , A spectroscopic survey of Southern Hemisphere white dwarfs—V. Data for 15 additional stars and the nature of the W219 group	637
<i>Whiteoak, J. B. and Gardner, F. F.</i> , Go 55-085, an H II region-molecular cloud complex	29P
<i>Wickramasinghe, D. T. and Bessell, M. S.</i> , High dispersion H β spectroscopy of six southern white dwarfs	11P
<i>Williams, D. J.</i> , Magnetohydrodynamic accretion and the instability of smooth trans-Alfvénic flow	537
<i>Williams, R. J. and John, T. L.</i> , The continuous absorption coefficient of the negative oxygen ion in the infrared	7P
<i>Willis, R. B.</i> (see Blackwell, D. E., p. 425)	
<i>Wolfendale, A. W.</i> (see Dodds, D.)	
<i>Wood, P. R.</i> , The mode of pulsation of Mira variables	15P
<i>Wood, P. R. and Taylor, R. J.</i> , The gas and horizontal branch star content of globular clusters	467
<i>Worswick, S. P.</i> (see Coleman, C. I.)	
<i>Yabushita, S.</i> , Jeans's type gravitational instability of finite isothermal gas spheres—II	85
<i>York, D.</i> (see Bahcall, J. N.)	
<i>Zel'dovich, Ya. B. and Sunyaev, R. A.</i> , On the possibility of radioastronomical investigation of the birth of galaxies	375

SUBJECT INDEX

	PAGE
Astrometry	
The effect of systematic differences between reference positions on the second harmonic of the Earth's gravitational potential, <i>P. Brosche</i>	131
Celestial mechanics	
The orbital resonance amongst the Galilean satellites of Jupiter, <i>A. T. Sinclair</i>	59
The effect of systematic differences between reference positions on the second harmonic of the Earth's gravitational potential, <i>P. Brosche</i>	131
On the Earth's axes of rotation and figure, <i>R. d'E. Atkinson</i>	381
Cosmic rays	
Galactic γ -rays and cosmic ray origin, <i>D. Dodds, A. W. Strong and A. W. Wolfendale</i>	569

PAGE		PAGE
53	Cosmology	
	Source counts at high spatial densities from pencil beam observations of background fluctuations, <i>J. V. Wall and D. J. Cooke</i>	9
143	Studies of rich clusters of galaxies—III. Photometry of the cluster A1930 and the m^*-z relation, <i>T. B. Austin, J. G. Godwin and J. V. Peach</i>	135
59	The porthole effect and rings of fire in finite metagalaxies, <i>Reinhard A. Breuer and Michael P. Ryan</i>	209
	A principle of impotence allowing for Newtonian cosmologies with a time-dependent gravitational constant, <i>P. T. Landsberg and N. T. Bishop</i>	279
	On the possibility of radioastronomical investigation of the birth of galaxies, <i>R. A. Sunyaev and Ya. B. Zel'dovich</i>	375
375	Mach's principle in general relativity, <i>D. J. Raine</i>	507
467	A note on the Zel'dovich $p = \rho$ cold big bang, <i>E. P. Liang</i>	551
	Earth	
33P	The effect of systematic differences between reference positions on the second harmonic of the Earth's gravitational potential, <i>P. Brosche</i>	131
	On the Earth's axes of rotation and figure, <i>R. d'E. Atkinson</i>	381
9	Galactic centre	
555	Neutral hydrogen in the galactic centre region—I. The observations, <i>R. J. Cohen</i>	659
243	Galactic structure and stellar dynamics	
171	The radio halo of the Galaxy, <i>Adrian Webster</i>	243
529	H β photometry of southern early-type stars and galactic structure away from the plane, <i>D. Kilkenny, P. W. Hill and Th. Schmidt-Kaler</i>	353
637	Orientation of planetary nebulae within the Galaxy, <i>Gary Melnick and Martin Harwit</i>	441
29P	Galaxies	
11P	Studies of rich clusters of galaxies—III. Photometry of the cluster A1930 and the m^*-z relation, <i>T. B. Austin, J. G. Godwin and J. V. Peach</i>	135
537	A study of 3000 faint galaxies, <i>R. J. Dodd, D. H. Morgan, K. Nandy, V. C. Reddish and H. Seddon</i>	329
7P	On the possibility of radioastronomical investigation of the birth of galaxies, <i>R. A. Sunyaev and Ya. B. Zel'dovich</i>	375
15P	Physical conditions in active nuclei—I. The Balmer decrement, <i>H. Netzer</i>	395
467	Gamma-ray astronomy	
85	Galactic γ -rays and cosmic ray origin, <i>D. Dodds, A. W. Strong and A. W. Wolfendale</i>	569
	General relativity	
375	The porthole effect and rings of fire in finite metagalaxies, <i>Reinhard A. Breuer and Michael P. Ryan</i>	209
	Mach's principle in general relativity, <i>D. J. Raine</i>	507
	Infrared astronomy	
	Symbiotic stars and dust, <i>B. Louise Webster and David A. Allen</i>	171
	The continuous absorption coefficient of the negative oxygen ion in the infrared, <i>T. L. John and R. J. Williams</i>	7P
	Intermediate infrared colours of M-dwarf stars, <i>I. S. Glass</i>	19P
PAGE	Interstellar medium	
	Line-leaking models for interstellar molecular emission and absorption—I. The anomalous absorption and emission by formaldehyde, <i>Margaret A. Pelling and D. ter Haar</i>	103
131	Go 55-o 85, an H II region-molecular cloud complex, <i>F. F. Gardner and J. B. Whiteoak</i>	29P
	Meteors	
59	Television observations of faint meteors—II. Light curves, <i>J. Jones and R. L. Hawkes</i>	159
	Nebulae—gaseous	
131	The radio remnant of Kepler's supernova, <i>S. F. Gull</i>	237
381	The X-ray, optical and radio properties of young supernova remnants, <i>S. F. Gull</i>	263
	On the structure of hydroxyl maser sources, <i>A. H. Cook</i>	605
569	Go 55-o 85, an H II region-molecular cloud complex, <i>F. F. Gardner and J. B. Whiteoak</i>	29P

Nebulae—planetary

- Electronographic measurements of the density structure of NGC 6543 using the O^+ and Cl^{++} ions, *Michael A. Dopita and Anthony H. Gibbons* ... 73
- Monochromatic isophotometry of planetary nebulae—I. Observations of NGC 6210, 6543, 6826, 7009, 7027 and 7662, *C. I. Coleman, N. K. Reay and S. P. Worswick* ... 415
- Orientation of planetary nebulae within the Galaxy, *Gary Melnick and Martin Harwit* ... 441

Photometry—non-stellar

- Monochromatic isophotometry of planetary nebulae—I. Observations of NGC 6210, 6543, 6826, 7009, 7027 and 7662, *C. I. Coleman, N. K. Reay and S. P. Worswick* ... 415

Physical processes

- Accretion and effluxion of mass and angular momentum, *R. N. Henriksen and K. C. Heaton* ... 27
- Massive black holes in extragalactic radio source components?, *M. J. Rees and W. C. Saslaw* ... 53
- Jeans's type gravitational instability of finite isothermal gas spheres—II, *S. Yabushita* ... 85
- Central gravitational redshifts from static massive objects, *P. K. Das and J. V. Narlikar* ... 87
- The X-ray, optical and radio properties of young supernova remnants, *S. F. Gull* ... 263
- The role of magnetic forces in sunspot equilibrium, *M. G. Adam* ... 287
- Dynamical instabilities and mass exchange in binary systems, *G. T. Bath* ... 311
- Physical conditions in active nuclei—I. The Balmer decrement, *H. Netzer* ... 395
- Expected polarization properties of binary X-ray sources, *M. J. Rees* ... 457
- Magnetohydrodynamic accretion and the instability of smooth trans-Alfvénic flow, *D. J. Williams* ... 537
- A note on the Zel'dovich $p = \rho$ cold big bang, *E. P. Liang* ... 551
- On the structure of hydroxyl maser sources, *A. H. Cook* ... 605
- Particle acceleration at pulsar magnetic poles, *N. J. Holloway* ... 619
- Quasar absorption spectra: radiative interactions between absorbing clouds and the origin of redshift 'doublets', *M. J. Rees* ... 1P

Pulsars

- The period derivatives of pulsars, *A. G. Lyne, R. T. Ritchings and F. G. Smith* ... 579
- Particle acceleration at pulsar magnetic poles, *N. J. Holloway* ... 619
- A new pulsar with a large duty-cycle, *D. K. Mohanty and V. Balasubramanian* ... 17P

Quasars

- Central gravitational redshifts from static massive objects, *P. K. Das and J. V. Narlikar* ... 87
- Ultraviolet colours of quasars, *D. H. Morgan and K. Nandy* ... 599
- Quasar absorption spectra: radiative interactions between absorbing clouds and the origin of redshift 'doublets', *M. J. Rees* ... 1P

Radio astronomy

- Source counts at high spatial densities from pencil beam observations of background fluctuations, *J. V. Wall and D. J. Cooke* ... 9
- Massive black holes in extragalactic radio source components?, *M. J. Rees and W. C. Saslaw* ... 53
- Line-leaking models for interstellar molecular emission and absorption—I. The anomalous absorption and emission by formaldehyde, *Margaret A. Pelling and D. ter Haar* ... 103
- The radio remnant of Kepler's supernova, *S. F. Gull* ... 237
- The radio halo of the Galaxy, *Adrian Webster* ... 243
- The X-ray, optical and radio properties of young supernova remnants, *S. F. Gull* ... 263
- On the possibility of radioastronomical investigation of the birth of galaxies, *R. A. Sunyaev and Ya. B. Zel'dovich* ... 375
- The 5C 5 survey of radio sources, *T. J. Pearson* ... 475
- The period derivatives of pulsars, *A. G. Lyne, R. T. Ritchings and F. G. Smith* ... 579
- Neutral hydrogen in the galactic centre region—I. The observations, *R. J. Cohen* ... 659
- A new pulsar with a large duty-cycle, *D. K. Mohanty and V. Balasubramanian* ... 17P
- Go 55-085, an H II region-molecular cloud complex, *F. F. Gardner and J. B. Whiteoak* ... 29P

Spectroscopy

- The identification of solar flare Fe XVIII to Fe XXIII emission lines from $2s^2 2p^k - 2s^2 n^2 1 2p^{k+1}$ transitions, *B. C. Fawcett and R. D. Cowan* ... 1
- Line-leaking models for interstellar molecular emission and absorption—I. The anomalous absorption and emission by formaldehyde, *Margaret A. Pelling and D. ter Haar* ... 103
- The interpretation of the forbidden emission lines from a coronal condensation, *H. E. Mason* ... 119
- Precision measurement of relative oscillator strengths—II. Fe I transitions from levels a^3D_4 (0.00 eV) and a^3D_3 (0.05 eV), *D. E. Blackwell, P. A. Ibbetson and A. D. Petford* ... 195

- Physical conditions in active nuclei—I. The Balmer decrement, *H. Netzer* ... 395
 Quasar absorption spectra: radiative interactions between absorbing clouds and the origin of redshift 'doublets', *M. J. Rees* ... 1P
 The continuous absorption coefficient of the negative oxygen ion in the infrared, *T. L. John and R. J. Williams* ... 7P

Stars—binary

- Dynamical instabilities and mass exchange in binary systems, *G. T. Bath* ... 311
 The spectroscopic binary system HD 158320 (=3U 1727-33?), *A. J. Penny, J. E. Penfold and L. A. Balona* ... 387
 Expected polarization properties of binary X-ray sources, *M. J. Rees* ... 457
 Evolution of helium white dwarfs in close binaries, *Ronald F. Webbink* ... 555
 A new spectroscopic orbit for Capella, *A. H. Batten and V. Erceg* ... 47P

Stars—chemical composition

- Curve-of-growth analysis of a red giant in M67, *R. Griffin* ... 181

Stars—clusters of

- Further observations of the Orion nebula cluster, *M. V. Penston, J. K. Hunter and A. O'Neill* ... 219
 The gas and horizontal branch star content of globular clusters, *R. J. Tayler and P. R. Wood* ... 467
 Near-infrared photometry of globular clusters—IV. The metal-poor cluster NGC 6656 (M22), *T. Lloyd Evans* ... 647

Stars—magnetic fields in

- Large scale magnetic fields in late-type stars, *D. L. Moss* ... 303
 HD 151965—a new bright Bp: Si variable star, *R. W. Hilditch* ... 25P

Stars—photometry of

- H β photometry of southern early-type stars and galactic structure away from the plane, *D. Kilbenny, P. W. Hill and Th. Schmidt-Kaler* ... 353
 The continuum flux distribution for Arcturus, *D. E. Blackwell, R. S. Ellis, P. A. Ibbetson, A. D. Petford and R. B. Willis* ... 425
 Photometry of SK 160 = SMC-X1, *J. E. Penfold, A. J. Penny and P. R. Warren* ... 445
 Spectrophotometry of stars near the cool end of the white dwarf sequence, *Gary Wegner* ... 529
 Near-infrared photometry of globular clusters—IV. The metal-poor cluster NGC 6656 (M22), *T. Lloyd Evans* ... 647
 Intermediate infrared colours of M-dwarf stars, *I. S. Glass* ... 19P
 HD 151965—a new bright Bp: Si variable star, *R. W. Hilditch* ... 25P

Stars—spectroscopy of

- Symbiotic stars and dust, *B. Louise Webster and David A. Allen* ... 171
 Curve-of-growth analysis of a red giant in M67, *R. Griffin* ... 181
 A spectroscopic survey of Southern Hemisphere white dwarfs—V. Data for 15 additional stars and the nature of the W219 group, *Gary Wegner* ... 637
 High dispersion H β spectroscopy of six southern white dwarfs, *M. S. Bessell and D. T. Wickramasinghe* ... 11P

Stars—structure and evolution of

- The evolution of the solar inner rotation, *Takeo Sakurai* ... 35
 Evolution of helium white dwarfs in close binaries, *Ronald F. Webbink* ... 555

Stars—variable

- Frequency analysis of the three delta Scuti stars BS 3265, 1653 and 242, *M. J. Smyth, R. R. Shobbrook and R. S. Stobie* ... 143
 The mode of pulsation of Mira variables, *P. R. Wood* ... 15P
 HD 151965—a new bright Bp: Si variable star, *R. W. Hilditch* ... 25P

Stars—velocities of

- Photoelectric radial velocities, Paper VI. Heard's IAU standard stars, *R. F. Griffin* ... 407

Sun

- The identification of solar flare Fe XVIII to Fe XXIII emission lines from $2s^2 2p^k - 2s^1 2p^{k+1}$ transitions, *B. C. Fawcett and R. D. Cowan* ... 1
 The evolution of the solar inner rotation, *Takeo Sakurai* ... 35
 The interpretation of the forbidden emission lines from a coronal condensation, *H. E. Mason* ... 119

The role of magnetic forces in sunspot equilibrium, <i>M. G. Adam</i>	287
Further measurements of emission line profiles in the solar ultraviolet spectrum, <i>B. C. Boland, E. P. Dyer, J. G. Firth, A. H. Gabriel, B. B. Jones, C. Jordan, R. W. P. McWhirter, P. Monk and R. F. Turner</i>	697
Ultraviolet astronomy	
Ultraviolet observations of HD 77581 (=2U 0900-40), <i>K. Nandy, W. McD. Napier and G. I. Thompson</i>	259
Further measurements of emission line profiles in the solar ultraviolet spectrum, <i>B. C. Boland, E. P. Dyer, J. G. Firth, A. H. Gabriel, B. B. Jones, C. Jordan, R. W. P. McWhirter, P. Monk and R. F. Turner</i>	697
X-ray astronomy	
Ultraviolet observations of HD 77581 (=2U 0900-40), <i>K. Nandy, W. McD. Napier and G. I. Thompson</i>	259
The X-ray, optical and radio properties of young supernova remnants, <i>S. F. Gull</i>	263
The spectroscopic binary system HD 158320 (=3U 1727-33?), <i>A. J. Penny, J. E. Penfold and L. A. Balona</i>	387
Photometry of SK 160 = SMC-X1, <i>J. E. Penfold, A. J. Penny and P. R. Warren</i>	445
Expected polarization properties of binary X-ray sources, <i>M. J. Rees</i>	457
Observation of an accretion wake and pre-eclipse dips in Centaurus X-3, <i>I. R. Tuohy and A. M. Cruise</i>	33P
Copernicus—X-ray observations of 3U 0750-49, <i>J. N. Bahcall, P. A. Charles, P. J. N. Davison, P. W. Sanford, E. Kellogg and D. York</i>	41P

287

697

259

697

259

263

387

445

457

33P

41P